REMARKS

Claims 17-35 are pending in this application. Claims 17-20, 23-25, 31, 32 and 34 are rejected and claims 21, 22, 26-30, 33 and 35 are objected to. Claims 17, 21, 22, 26, 31, 33 and 35 are amended hereby.

Responsive to the Examiner's objection to claims 21, 22, 26-30, 33 and 35, Applicant has amended claims 21, 22, 26, 33 and 35, to place these claims in independent form including all of the limitation of the base claim and any intervening claims. Accordingly, Applicant submits that claims 21, 22, 26-30, 33 and 35 are now in allowable form.

Responsive to the rejection of claims 17-19 and 31 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,771,197 (Ivanto et al.), Applicant has amended claims 17 and 31, and submits that claims 17-19 and 31 are now in condition for allowance.

Ivanto et al. disclose a frequency converter-controlled squirrel cage motor 8 (Figs. 1 and 2) including a stationary axle 4 fixed to stands 12. On axle 4, stator 3 is integrally mounted, and electric leads 7 coming to stator 3 run through a cable entry 6 provided in axle 4. Cylinder 1 is rotatably carried on stationary axle 4 by way of end plates 13 and bearings 5 (column 1, line 62 through column 2, line 4).

In contrast claim 17, as amended, recites in part:

a machine actuator having a functional part with a short circuit arrangement ... being at least one of hollow and solid short circuit conductors explosion welded to said rotor.

(Emphasis added) Applicant submits that such an invention is neither taught, disclosed nor suggested by Ivanto et al. or any of the other cited references, alone or in combination, and includes distinct advantages thereover.

Ivanto et al. disclose a frequency converter-controlled squirrel cage motor 8 including a stationary axle 4, upon which stator 3 is integrally mounted. Cylinder 1 is rotatably carried on stationary axle 4 by way of end plates 13 and bearings 5. However, Ivanto et al. alone or in combination with any other cited reference, fails to disclose or suggest a machine actuator having a functional part with a short circuit arrangement being at least one of hollow and solid short circuit conductors explosion welded to the rotor, as recited in claim 17.

Applicant's invention has distinct advantages in that the short circuit conductors are intimately connected to the rotor by way of being explosion welded together. For all of the foregoing reasons, Applicant submits that claim 17, and claims 18 and 19 depending therefrom, are now in condition for allowance, which is hereby respectfully requested.

In further contrast, claim 31, as amended, recites in part:

incorporating a ... short circuit arrangement being at least one of hollow and solid short circuit conductors explosion welded to said rotor.

(Emphasis added) Applicant submits that such an invention is neither taught, disclosed nor suggested by Ivanto et al. or any of the other cited references, alone or in combination, and includes distinct advantages thereover.

Ivanto et al. disclose a frequency converter-controlled squirrel cage motor 8 including a stationary axle 4, upon which stator 3 is integrally mounted. Cylinder 1 is rotatably carried on stationary axle 4 by way of end plates 13 and bearings 5. However, Ivanto et al. alone or in combination with any other cited reference, fails to disclose or suggest incorporating a short circuit arrangement being hollow or solid short circuit conductors explosion welded to the rotor, as recited in claim 31.

Applicant's invention has distinct advantages in that the short circuit conductors are intimately connected to the rotor by way of being explosion welded together. For all of the VOI0200.US

foregoing reasons, Applicant submits that claim 31 is now in condition for allowance, which is hereby respectfully requested.

Claims 20 and 23-25 depend from claim 17, and claims 32 and 34 depend from claim 31, and claims 17 and 31 have been placed in condition for allowance for the reasons given above. Accordingly, Applicant submits that claims 20, 23-25, 32 and 34 are now in condition for allowance, which is hereby respectfully requested.

For the foregoing reasons, Applicant submits that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for allowance, and Applicant respectfully requests withdrawal of all rejections and allowance of the claims.

In the event Applicant has overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicant hereby conditionally petitions therefor and authorizes that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3400.

Respectfully submitted,

Todd T. Taylor

Registration No. 36,945

Attorney for Applicant

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231, on December 23, 2002.

Todd T. Taylor, Reg. No. 36,945

Name of Registered Representative

Signature

December 23, 2002

Date

TTT6/dc

TAYLOR & AUST, P.C.

Telephone: 260-897-3400

Facsimile: 260-897-9300

Return postcard

142 S. Main Street

P.O. Box 560 Avilla, IN 46710

Enc.:

Title: CONSTRUCTION AND METHOD OF AN ELECTRIC DRIVE MOTOR Application Serial No.: 09/889,279 Group: 2834 Examiner: K. Addison



ATTACHMENT A: MARKED-UP COPY SHOWING AMENDMENTS

IN THE CLAIMS

Please substitute the following amended claims 17, 21, 22, 26, 31, 33 and 35 for original claims 17, 21, 22, 26, 31, 33 and 35:

- 17. (Amended) An electric motor drive, comprising:
- a stator;
- a non-rotary shaft carrying said stator;
- a plurality of bearings connected to said non-rotary shaft;
- a rotor rotatably positioned around said stator, said rotor being rotatably carried by said bearings; and
- a machine actuator having a functional part with a short circuit arrangement associated with said rotor for operating said actuator, said short circuit arrangement being at least one of hollow and solid short circuit conductors explosion welded to said rotor.
 - 21. (Amended) [The] <u>An</u> electric motor drive, <u>comprising</u>: [of claim 17, wherein] <u>a stator</u>;
- a non-rotary shaft carrying said stator, said non-rotary shaft is hollow and is configured for the flow in an axial direction therethrough of a cooling fluid including at least over-press air;
 - a plurality of bearings connected to said non-rotary shaft;
- a rotor rotatably positioned around said stator, said rotor being rotatably carried by said

bearings; and

Title: CONSTRUCTION AND METHOD OF AN ELECTRIC DRIVE MOTOR

Application Serial No.: 09/889,279 Group: 2834 Examiner: K. Addison

a machine actuator having a functional part with a short circuit arrangement associated with said rotor for operating said actuator.

22. (Amended) [The] <u>An</u> electric motor drive, <u>comprising</u>: [of claim 17, further comprising]

a stator;

a non-rotary shaft carrying said stator;

a plurality of bearings connected to said non-rotary shaft;

a rotor rotatably positioned around said stator, said rotor being rotatably carried by said bearings;

a machine actuator having a functional part with a short circuit means associated with said rotor for operating said actuator; and

hollow short circuit conductors configured for the flow therethrough of a cooling fluid including at least over-press air, said hollow short circuit conductors are said short circuit means.

26. (Amended) [The] An electric motor drive, comprising: [of claim 17, further comprising:]

a stator;

a non-rotary shaft carrying said stator;

a plurality of bearings connected to said non-rotary shaft;

a stationary vacuum box; [and]

at least one supporting bracket being attached to said stationary vacuum box, said non-rotary shaft being attached to said at least one supporting bracket;
Voi0200.US

Title: CONSTRUCTION AND METHOD OF AN ELECTRIC DRIVE MOTOR

Application Serial No.: 09/889,279 Group: 2834 Examiner: K. Addison

a rotor rotatably positioned around said stator, said rotor being rotatably carried by said bearings, [wherein] said rotor [is] being configured as a shell of a vacuum belt conveyor pulley; and

a machine actuator having a functional part with a short circuit arrangement associated with said rotor for operating said actuator.

31. (Amended) A method of constructing an electric motor drive comprising the steps of: mounting a stator on a non-rotary shaft;

positioning a rotor around said stator;

connecting said rotor to said non-rotary shaft with bearings; and

incorporating a short circuit arrangement into said rotor, said short circuit arrangement being at least one of hollow and solid short circuit conductors explosion welded to said rotor; wherein said rotor is configured as a functional part of a machine actuator.

33. (Amended) [The] A method of constructing an electric motor drive [claim 31, further] comprising the steps of:

mounting a stator on a non-rotary shaft;

positioning a rotor around said stator;

connecting said rotor to said non-rotary shaft with bearings;

incorporating a short circuit arrangement into said rotor;

cooling said electric motor drive with a cooling fluid including at least one of over-press air; and

directing said cooling fluid, said non-rotary shaft being hollow, said cooling fluid being so Voi0200.US

Title: CONSTRUCTION AND METHOD OF AN ELECTRIC DRIVE MOTOR

Application Serial No.: 09/889,279 Group: 2834 Examiner: K. Addison

directed through at least one of said hollow non-rotary shaft and hollow short-circuit conductors; wherein said rotor is configured as a functional part of a machine actuator.

35. (Amended) [The] A method of constructing an electric motor drive [claim 31, further] comprising the steps of:

mounting a stator on a non-rotary shaft;

positioning a rotor around said stator;

connecting said rotor to said non-rotary shaft with bearings;

incorporating a short circuit arrangement into said rotor;

forming said rotor as a shell of a vacuum belt conveyor pulley;

providing a stationary vacuum box;

attaching at least one supporting bracket to said stationary vacuum box; and

attaching said non-rotary shaft to said at least one supporting bracket;

wherein said rotor is configured as a functional part of a machine actuator.